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DTB PATENT DEPARTMENT GERMANY

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New claims 1 - 8

(Shall replace all present claims)

1. Circuit arrangement having a mains connection
5 (NA), a mains switch (S1) with a first and a second
switching contact (1, 2), a demagnetization coil (ES)
and a switch-mode power supply (I) comprising
a driver circuit (DC), a transformer (TR) with a
primary winding (W1) and an auxiliary winding (W2) for
10 providing a supply voltage (VCC) for the driver circuit
(DC), a switching transistor (T1) in series with the
primary winding (W1), the driver circuit (DC) producing
a control voltage (DS) for the switching transistor
(T1), a rectifier means (BR) for rectifying a mains
15 voltage, and an energy-storage capacitor (C1) coupled
between the rectifier means (BR) and the primary
winding (W1),

the circuit arrangement comprising further a power
factor coil (NS) for power factor correction, which is
20 arranged between the mains connection (NA) and said
energy-storage capacitor (C1), characterized in that

the first switching contact (1) is arranged
between the mains connection (NA) and the
demagnetization coil (ES) for switching the
25 demagnetization coil (ES) on and off, and

the second switching contact (2) is arranged
between the auxiliary winding (W2) and the driver
circuit (DC) for switching off the supply voltage
(VCC), or is arranged for switching off a control
30 voltage for the driver circuit (DC) in order to switch
off the switching transistor (T1).

2. The circuit arrangement as claimed in claim 1,
characterized in that a diode (D1) and a second
35 capacitor (C2) are coupled to a connection (A) of the
auxiliary winding (W2) in order to rectify and smooth
said supply voltage (VCC), and in that the second

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switching contact (2) is arranged between the second capacitor (C2) and the driver circuit (DC).

3. The circuit arrangement as claimed in claim 1 or
5 2, characterized in that the power factor coil (NS) is arranged upstream of the rectifier means (BR).

4. The circuit arrangement as claimed in one of the preceding claims 1 - 3, characterized in that the
10 circuit arrangement comprises further a mains filter (NF), a first parallel capacitor (C4) between the mains filter (NF) and the mains connection (NA) and a second parallel capacitor (C3) between the mains filter (NF) and the rectifier means (BR), that the demagnetization
15 coil (ES) is arranged in parallel to the second parallel capacitor (C3) and in parallel to the rectifier means (BR), and that the connections (a, b) of the first switching contact (1) are connected in series between the second parallel capacitor (C3) and
20 the demagnetization coil (ES) for switching the demagnetization coil (ES) on and off.

5. The circuit arrangement as claimed in claim 4, characterized in that a posistor (PS) is arranged in
25 series between the first switching contact (1) and the demagnetization coil (ES).

6. Circuit arrangement having a mains connection (NA), a user accessible mains switch (S1) with a first
30 and a second mechanical switching contact (1, 2), a demagnetization coil (ES) and a switch-mode power supply (I) comprising a driver circuit (DC), a transformer (TR) with a primary winding (W1) and an auxiliary winding (W2) for providing a supply voltage
35 (VCC) for the driver circuit (DC), and a switching transistor (T1) in series with the primary winding (W1), the driver circuit (DC) producing a control

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voltage (DS) for the switching transistor (T1),
characterized in that

the first switching contact (1) is arranged
between the mains connection (NA) and the
5 demagnetization coil (ES) for switching the
demagnetization coil (ES) on and off, and

the second switching contact (2) is arranged
between the auxiliary winding (W2) and the driver
circuit (DC) for switching off the supply voltage
10 (VCC), or is arranged for switching off a control
voltage for the driver circuit (DC) in order to switch
off the switching transistor (T1).

7. Appliance, having a circuit arrangement in
15 accordance with one of the preceding claims.

8. The appliance as claimed in claim 7, characterized
in that the appliance comprises a picture tube, on
which the demagnetization coil (ES) is mounted.

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